

DENSITY, OPEN SPACE & PARKING CALCULATIONS SHEET

PROJECT: Proposed Residential Development
at Cairns Road, Sligo, Co. Sligo

PROJECT No: 5470

To: SLIGO COUNTY COUNCIL

PLOT RATIO CALCULATION

Gross Site Area	22,434 sq.m.
Net Internal Floor Area	<u>8,434 sq m</u>
Site area	22,434 sq m = 0.37.6
Proposed Plot Ratio:	038:1
Allowable Plot Ratio: (from Sligo & Environs Development Plan Table 12.2 for outer suburban site proximate to public transport)	0.35- 0.50:1

DENSITY – DWELLINGS PER HECTARE CALCULATION

Gross Site Area	22,434 sq.m.
less (-) Existing Ard Cairn Roadway/ turning areas & Set-back areas along Cairns Road roadway & laneway/ hedgerow to south-east (Not Buildable Area)	<u>1,250 sq.m.</u>
Net Site Area	21,184 sq.m. (2.1 hectares)
 Total Number of Units	 <u>74 Units</u>
Net Site Area	2.1ha = 35 Units per Hectare
Proposed Units per Hectare:	35 Dwellings per Hectare
Requirement: (from Department of Housing, Local Government & Heritage Sustainable Residential Development in Urban Areas Residential Density Guidelines for outer suburban greenfield sites)	35-50 Dwellings per Hectare

SITE COVERAGE:

Site Area:	22,434 sq.m.
Gross Building Area Site Coverage:	4,825 sq.m.
Area of Site Covered by Building Site area	$\frac{4,825 \text{ sq.m.}}{22,434 \text{ sq.m.}} = 0.22$
Proposed Site Coverage:	0.22:1

PUBLIC OPEN SPACE:

Greenfield site zoned Residential requires 15% of the total area of the site to be public open space.

Gross Site Area: = **22,434 sq.m.**

15% of Gross Site Area (22,434 sq.m.) = 3,366 sq.m.

Proposed Areas of Public Open Space:

Area 1: Central Amenity Area = 2,363 sq.m.

Area 2: Amenity Area in Pocket Park = 233 sq.m.

Area 3: Amenity Area to north-east = 954 sq.m.

Proposed Public Open Space = 3,540 sq.m. (15.7% of Gross Site Area)

COMMUNAL OPEN SPACE

For apartments, under the Apartment Design Guidelines, Communal Open Space is required at a rate of 7 sq.m. per 2-Bedroom (5-person) Unit; 6 sq.m. per 2-Bedroom (3-person) Units and 5 sq.m. per 1-Bedroom Units. Therefore, the required quantum of Communal Open Space required to serve the proposed apartment/ duplex block at the north-east of the site has been calculated as follows

5No. 1 Bed Apartments x 5 sq.m. = 25 sq.m.

7No. 2-Bed (3-person) Apartments x 6 sq.m. = 42 sq.m.

12No. 2-Bed (4-person) Apartments x 7 sq.m. = 84 sq.m.

Total Required Communal Open Space = 151 sq.m.

Total Communal Open Space Provided = 737 sq. metres

The proposed Communal Open Space is located directly adjacent to the 2No. Duplex/ Apartment Blocks

PRIVATE OPEN SPACE

Min. Required as per Development Plan & National Apartment Design guidelines:

- 3 & 4 Bed Houses: 60-75 sq.m.
- 2 Bedroom (4-person) Apartments: 7 sq.m. per unit
- 2 Bedroom (3-person) Apartments: 6 sq.m. per unit
- 1 Bedroom Apartments: 5 sq.m. per unit

Total Private Open Space Provided:

- 3 & 4 Bed Houses: All private amenity spaces are >60 sq.m. for each house in the form of private rear gardens
- 2 Bedroom (4-person) Apartments: All private amenity spaces >9 sq.m. per unit in the form of external terraces
- 2 Bedroom (3-person) Apartments: All private amenity spaces >6 sq.m. per unit in the form of external terraces
- 1 Bedroom Apartments: All private amenity spaces >5 sq.m. per unit in the form of external terraces

The provision of Private Open Space is in compliance with the requirement of applicable standards.

Please refer to Sheet No. PL-011 Schedule of Areas for details of the private amenity areas provided for each individual units.

CAR PARKING CALCULATIONS

Required Car Parking:

We note that *Table 16.C Vehicle parking requirements* of the Development Plan sets out minimum car parking provision requirements at a rate of:

- 1 space per 1-bedroom apartment unit
- 1 space per 2-bedroom apartment unit
- 1 space per 3-bedroom house unit
- 2 spaces per 4-bedroom house unit

Total number of spaces required:

28 No. 4 Bedroom Houses x 2 space per unit	= 56 No. spaces
<u>46 No.1, 2, & 3 Bedroom Units x 1 space per unit</u>	<u>= 46 No. spaces</u>
Total Car parking spaces required	= 102 spaces

Proposed Car Parking provisions:

- 1 space per 1-bedroom apartment unit,
- 1 space per 2-bedroom apartment unit,
- 1 space per 2 No. 3-bedroom house units (Units No. 38 & 39)
- 2 spaces per 20 No. 3-bedroom house units
- 2 spaces per 4-bedroom house unit

Total number of spaces provided:

28 No. 4 Bedroom Houses x 2 space per unit	= 56 No. spaces
20 No. 3 Bedroom Houses x 2 space per unit	= 40 No. spaces
2 No. 3 Bedroom Houses x 1 space per unit	= 2 No. spaces
<u>24 No.1 & 2 Bedroom Units x 1 space per unit</u>	<u>= 24 No. units</u>
Total Car parking spaces provided	= 122 No. spaces

The overall provision of 122 spaces is in adherence with the Development Plan and is provided in a mixture of on-curtilage parking along with grouped parking and parking courts.

BICYCLE PARKING CALCULATIONS

Required Cycle Parking:

We note that *Table 16.C Vehicle parking requirements* of the Development Plan sets out minimum bicycle parking provision requirements at a rate of:

Requirement = 1 bicycle spaces per each unit

This gives a total overall requirement of 74 No. cycle spaces for the development

Proposed Cycle Parking Provision:

Apartments:

It is proposed to provide bicycle parking at a rate of 1 space per bedroom for the apartment units, as per national Apartment Design Guidelines standards. In addition, in line with national standards for apartments, visitor bicycle parking is proposed at a rate of 1 space per every 2 units

- 1 space per 1-bedroom apartment unit
- 2 space per 2-bedroom apartment unit
- 1 visitor space per every 2No. units

Total number of spaces proposed:

5 No. 1 Bedroom Apartments x 1 space per unit	=	5 No. spaces
19 No. 2 Bedroom Apartments x 2 spaces per unit	=	38 No. spaces
<u>24 Apartment Units x 0.5 visitor space per unit</u>	=	<u>12 No., spaces</u>
Total Cycle parking spaces for Apartments	=	55 No. spaces

Houses:

It is proposed to provide bicycle parking at a rate of 1 space per unit for the house units, as per the Development Plan standards. In addition, visitor bicycle parking is proposed at a rate of 1 space per every 2 units

- 1 space per 3 -bedroom house unit
- 1 space per 4-bedroom house unit
- 1 visitor space per every 2No. units

Total number of spaces proposed:

22 No. 3-Bedroom Apartments x 1 space per unit	=	22 No. spaces
28 No. 4-Bedroom Houses x 2 space per unit	=	28 No. spaces
<u>50 House Units x 0.5 visitor space per unit</u>	=	<u>25 No. spaces</u>
Total Cycle parking spaces for Houses	=	75 No. spaces

Overall Provision:

Total Cycle parking spaces for Apartments & Houses = 130 No. spaces

This level of provision is in excess of the Development Plan requirements

For the apartment/ duplex units bicycle parking is provided in the form of secure lockable double-stacked bicycle stores which are in communal landscaped areas located proximate to the units/ blocks they serve

For the semi-detached and end of terrace dwelling houses bicycle parking is provided in the form of secure lockable bicycle stands in the private rear gardens.

For the mid-terrace dwelling houses bicycle parking is provided by way of grouped secure lockable Sheffield stands in landscaped areas located proximate to the units they serve.

Visitor bicycle parking for the house units is provided by way of grouped secure lockable Sheffield stands in landscaped areas located proximate to the units/ blocks they serve.